Claims

1. An encoding and input method of world characters, used in a computer device for encoding and inputting the world characters, said computer device comprising a numerical keypad; Said method comprises the steps of:

for each category of world characters, allocating some basic elements forming the character of this category or capable of determining the character of this category to the corresponding number keys on the numerical pad, the code of said each basic element is uniquely determined by area code and/or position code, where said area code is the number of the key at which the element is located, said position code is the position number in the number keys to which the basic element pertains;

selecting the category of the characters to be inputted;

for each character or each word of the character category to be inputted, splitting it as a combination of some of said elements;

arranging in order the codes corresponding to each element in said combination and taking them as the code of the character or the word; and

inputting the code of the character or the word.

2. The encoding and input method of claim 1, wherein

said world characters are classified into block characters, linear characters, hybrid characters, punctuations and symbols; Said block characters are classified as block ideograph character and block phonetic character;

as to the block ideograph character, said basic elements respectively comprise basic strokes and the combinations thereof forming the glyph of said block ideograph character, and PinYin alphabets representing the pronunciation of the block ideograph character; as to the block phonetic character, said basic elements respectively comprise the basic strokes and the combinations thereof forming the glyph of said block phonetic character, and

the alphabets representing the pronunciation and forming the glyph of the block phonetic character;

as to the linear character, said elements are the alphabets of the liner character;

as to the hybrid character, said basic elements comprise the basic strokes and the combinations thereof forming the block ideograph character, as well as the alphabets forming the linear character;

as to the puncutaions, said elements are the strokes of the punctuations.

3. The encoding and input method of claim 2, wherein

said block ideograph characters include Chinese character for which said basic elements may respectively include the basic strokes and the combinations thereof forming the glyph of the Chinese character, the PinYin alphabets or the initial consonant and the final representing the pronunciation of the Chinese character, the basis strokes and the combinations thereof forming the glyph of Chinese character and the PinYin alphabets or the initial consonant and the final representing its pronunciation;

said block phonetic characters include Korean character for which said basic elements respectively include the basic strokes and the combinations thereof forming the glyph of Hanja character, the Korean alphabets forming the Korean character, and the Korean alphabets representing the Korean pronunciation of the Hanja character;

said linear characters include English, French, German, Italian, Spanish, Russian, Greek, and Arabic for which said basic elements are their alphabets;

Said hybrid characters include Japanese for which the basic elements include the basic strokes and the combinations thereof forming the glyph of Kanji characters, the kana forming the Japanese characters, the kana representing the Japanese pronunciation of the Kanji characters, and the alphabets forming Japanese Roman words;

Said punctuations including: full stop (.), hyphen (-), dash (-), commas (,),

caesura sign (、), separation mark (.), emphasis mark (.), ellipse (... ...), exclamation mark (!), semicolon (;); colon (:), quotation mark (?), single book-title mark (<>),double book-title mark (《》), vertical single quotation mark (「 」), vertical double quotation mark (『 』) , horizontal double quotation mark (""), horizontal single quotation mark (' '), bracket (), hollowed square bracket (〔 〕), solid square bracket(【 】), blank, plus, subtraction, times, division, &, \$, %, £, Θ, Ξ, Ψ, Ω, Π, @.

4. The encoding and input method of claim 3, wherein said basic elements are the basic Chinese strokes and the combinations thereof when the Chinese characters are encoded by Chinese glyph, and their encodings are determined only by their area codes; the basic strokes, the combinations thereof, and their encodings are determined by the following steps:

a. classifying the Chinese strokes into five basic strokes, i.e., horizontal, vertical, left-falling, dot, and hook, which are defined with codes of 1, 2, 3, 4, and 5 respectively, thus forming the codes of "one stroke" elements;

b. combining any two strokes of the horizontal, vertical, left-falling, dot, and hook, adding its respective stroke codes of each combination, and performing the operation of subtracting ten if the sum is equal to or over ten, thus forming the codes of "2-stroke combinations" elements;

c. combining any three strokes of the horizontal, vertical, left-falling, dot, and hook, adding its respective stroke codes of each combination, and performing the operation of subtracting ten if the sum is equal to or over ten, thus forming the codes of "3-stroke combinations" elements;

d. for the combinations of more than three strokes from the horizontal, vertical, left-falling, dot, and hook, adding its respective stroke codes of each combination, and performing the operation of subtracting ten if the sum is equal to or over ten, thus forming the codes of "more than 3-stroke combinations" elements.

5. The encoding and input method of claim 4, wherein said basic elements

and their codes are as follows:

"one stroke" elements comprise the horizontal, vertical, left-falling, dot, and hook, the codes of them are 1, 2, 3, 4, and 5 respectively;

"2-stroke combinations" elements comprise: horizontal and horizontal, horizontal and vertical, horizontal and left-falling, horizontal and dot, horizontal and hook, vertical and vertical, vertical and left-falling, vertical and dot, vertical and hook, left-falling and left-falling, left-falling and dot, left-falling and hook, dot and dot, dot and hook, hook and hook; the codes of them are 2 , 3 , 4 , 5 , 6; 4 , 5 , 6 , 7; 6, 7, 8; 8 , 9; 0;

"3-stroke combinations" elements comprise: for 寸, 弋, the code of each is 0; for 犭, 门, 己, 弓, 子, 纟, 马, the code of each is 1; for 夕, 夂, 宀, 小, the code of each is 2; for 彳, 辶, the code of each is 3; for 工, 土, 幺, the code of each is 4; for 艹, 巛, the code of each is 5; for 廾 the code thereof is 6; for 扌, 彐, the code of each is 7; for 大, 口, 亻, 广, the code of each is 8, and for 尤, 小, 巾, 山, 彡, 忄, 氵, 尸, 女, the code of each is 9;

"more than 3-stroke combinations" elements comprising: 木, 月, 钅, 火, 水, 日, the codes of them are 0, 0, 1, 4, 7, 9, respectively;

6. The encoding and input method of claim 4 or 5, wherein

based on the "one stroke" and "stroke combinations" elements, and their area codes defined, encoding the Chinese characters by the steps of:

based on the classification of Chinese character, phrase, and sentence, according to the writing orders of strokes, and the integrity principle of the structure of the elements, taking the codes in an order from the combination of more strokes to combination of less strokes, i.e. taking firstly the codes of "more than 3-stroke combinations", then the codes of "3-stroke combinations", then "2-stroke combinations", and finally the codes of "one stroke"; for each Chinese character, four codes at most, one code at least.

7. The encoding and input method of claim 6, wherein the encoding of single Chinese character comprises the steps of:

determining whether the single character is a unified character or a composite character;

for the unified character, encoding it as a whole character; and

for the composite character, encoding it by its radical and remaining.

8. The encoding and input method of claim 7, wherein the encoding of the unified character comprises the steps of:

determining if the number of the codes of the unified character exceed 4;

for the unified character with more than 4 codes, taking its first three codes and the last code sequentially to form the codes of the character;

for the unified character with no more than four codes, taking all codes of the unified character sequentially to form the codes of the character.

9. The encoding and input method of claim 7, wherein the encoding of the composite character by its radical and remaining comprising the steps of:

split a composite character into radical and remaining parts according to the classification of the radicals of Chinese characters, encode the elements of the radical and the elements of the remaining respectively, and the codes of the radical are combined with those of the remaining to form the codes of the composite character; for each composite character, four codes at most, and two codes at least;

the codes of the radical to be taken do not exceed two codes, and the codes of remaining to be taken do not exceed three codes; for the codes to be taken from the radical and the remaining, according to the writing orders of strokes and the integrity principle of the structure of elements, taking one code for "扌, 木, 水, 土, 火, 日, 月" and the "stroke combinations" of no more than three strokes, taking two codes for the "stroke combinations" of more than three strokes; taking the codes in an order from the combination of more strokes combination of to less strokes, i.e. taking firstly the code of "more than 3-stroke combinations": 扌, 木, 水, 土, 火, 日, 月", then the code of "3-stroke combinations", then "2-stroke combinations", and finally the code

of "one stroke";

no more than four codes are taken from each composite character, and the encoding is carried out depending on whether the number of the codes of the composite character exceed 4.

10. The encoding and input method of claim 9, wherein the encoding of composite character by radical and remaining comprises the steps of:

determining if the number of the codes of the composite character exceed 4;

for the composite character with no more than four codes, taking one code from the radical, one to three codes from the remaining sequentially, or taking two codes from the radical, one or two codes from the remaining, thus forming the codes of the character in sequence;

for the composite character with more than four codes, taking one code from the radical, taking first two codes and the last code from the remaining sequentially, or taking the first and the last codes from the radical, taking the first and the last codes from the remaining, thus forming the code of the character in sequence.

11. The encoding and input method of any one of claims 4, 5 and 6, wherein the encoding of a phrase formed by characters comprises the steps of:

the encoding of 2-character phrase: taking the first and last codes of each character sequentially, thus forming the codes of the phrase;

the encoding of 3-character phrase: taking the first codes of the first two characters, and the first and last codes of the last character sequentially, thus forming the code of the phrase in sequence; and

the encoding of multi-character phrase: taking the first codes from the first three characters and the last character, thus forming the codes of the phrase with totally four codes in sequence.

12. The encoding and input method of any one of claims 4 and 5, wherein the encoding of a sentence formed by characters comprises the steps of:

determining the first stroke combination of each single character forming the sentence;

encoding the stroke combination of each single character to derive the codes of the fist stroke combination of each single character forming the sentence;

forming the codes of the sentence by the codes of each stroke combination.

13. A retrieving method according to the encoding and input method of any one of claims 6-11, comprising:

the retrieving method for the retrieving system of electronic publishing type, comprising the steps of:

encoding Chinese character needed to be retrieved;

inputting the codes of the Chinese character in a prompt column to get the location code of the Chinese character; and

searching the Chinese character needed to be retrieved and its description in text column based on the location code of the Chinese character needed to be retrieved;

the retrieving method for the retrieving system of press publishing, comprising the steps of:

encoding Chinese character needed to be retrieved;

searching the codes of the Chinese character in the index column to get the location code of the Chinese character; and

searching the Chinese character needed to be retrieved and its description in text based on the location code of the Chinese character needed to be retrieved.

14. The encoding and input method of claim 3, wherein

when encoding the Chinese character by its PinYin alphabets, said basic elements include the PinYin alphabets representing the pronunciation of the Chinese character and the tone thereof, wherein the codes of the Chinese

character are formed in sequence by the area codes of PinYin alphabets representing the pronunciation of the Chinese character and the tone codes, and wherein said tone codes correspond to four different numbers selected from numbers 0-9 to encode the tone of the Chinese character which are .

15. The encoding and input method of claim 3, wherein

when encoding the Chinese character by the PinYin alphabets of the Chinese character, said basic elements comprise the PinYin alphabets representing the pronunciation of the Chinese character, and the codes of the Chinese character are formed by the area codes of the PinYin alphabets in sequence.

16. The encoding and input method of claim 14 or 15, wherein said PinYin alphabets are arranged in areas 2-9:

Positions 1-4 of area 2 are correspondingly for: a, b, c, d

Positions 1-3 of area 3 are correspondingly for: e, f, g

Positions 1-4 of area 4 are correspondingly for: h, i, j, k

Positions 1-3 of area 5 are correspondingly for: l, m, n

Positions 1-3 of area 6 are correspondingly for: o, p, q

Positions 1-3 of area 7 are correspondingly for: r, s, t

Positions 1-3 of area 8 are correspondingly for: u, v, w

Positions 1-3 of area 9 are correspondingly for: x, y, z.

17. The encoding and input method of claim 14 or 15, wherein said PinYin alphabets are arranged in areas 0-9:

Positions 1-2 of area 0 are correspondingly for: a, b

Positions 1-2 of area 1 are correspondingly for: c, d

Positions 1-3 of area 2 are correspondingly for: e, f, g

Positions 1-2 of area 3 are correspondingly for: h, i

Positions 1-2 of area 4 are correspondingly for: j, k

Positions 1-3 of area 5 are correspondingly for: l, m, n

Positions 1-3 of area 6 are correspondingly for: o, p, q

Positions 1-3 of area 7 are correspondingly for: r, s, t

Positions 1-3 of area 8 are correspondingly for: u, v, w

Positions 1-3 of area 9 are correspondingly for: x, y, z.

18. A retrieving method according to the encoding and input method of claims 14 or 15, comprising:

a retrieving method for a retrieving system of electronic publishing, comprising the steps of:

inputting PinYin alphabets by the PinYin syllables of the Chinese character;

getting the location codes of the PinYin syllables and the Chinese character needed to be retrieved in the index column; and

searching the Chinese character needed to be retrieved and its description in text column based on the location code of the Chinese character;

a retrieving method for a retrieving system of press publishing type, comprising the steps of:

searching the PinYin alphabets by the PinYin syllables of the Chinese character;

getting the location codes of the PinYin syllables and the Chinese character needed to be retrieved in the index; and

searching the Chinese character needed to be retrieved and its description in text column based on the location code of the Chinese character.

19. The encoding and input method of claim 3, wherein

when encoding the Chinese character by its Chinese pronunciation, said basic elements are the initial consonant and the final of the phonetic alphabets representing the pronunciation of the Chinese character, wherein the codes of the Chinese character is formed in sequence by the area codes and the position codes of the initial consonant, and the final representing the pronunciation of the Chinese characterin.

20. The encoding and input method of claim 3, wherein

when encoding the Chinese character by its Chinese pronunciation, said basic elements comprises the area codes of the initial consonant and the final of the phonetic syllables representing the Chinese pronunciation of the Chinese character, and the codes of the Chinese character is formed in sequence by the area codes of the initial consonant, and the final of phonetic syllables representing its Chinese pronunciation.

21. The encoding and input method of claim 3, wherein

when encoding the Chinese character by its Chinese pronunciation, said basic elements are the initial consonant, the final and the tone of the PinYin alphabets representing the pronunciation of the Chinese character, and the codes of the Chinese character is formed sequentially by the area codes of the initial consonant and the final, and the tone code representing the pronunciation of the Chinese character.

22. The encoding and input method of claim 21, wherein the codes of the tone are: 1 for the high-level tone (-), 2 for the rising tone (/), 3 for the third tone (v), and 4 for the falling tone (\).

23. The encoding and input method of any one of claims 19 to 21, wherein the area codes and the position codes of the initial consonants and finals of the PinYin are determined as:

Positions 1-4 of area 0 are correspondingly for: b, p, a, o

Positions 1-4 of area 1 are correspondingly for: m, f, e, i

Positions 1-4 of area 2 are correspondingly for: d, t, u, ü

Positions 1-4 of area 3 are correspondingly for: n, l, ai, ei

Positions 1-4 of area 4 are correspondingly for: g, k, ao, ou

Positions 1-4 of area 5 are correspondingly for: h, j, an, en

Positions 1-4 of area 6 are correspondingly for: q, x, ang, eng

Positions 1-4 of area 7 are correspondingly for: zh, ch, ong, ie

Positions 1-4 of area 8 are correspondingly for: sh, r, in, un

Positions 1-4 of area 9 are correspondingly for: z, c, s, ing.

24. The encoding and input method of any one of claims 19 to 21, wherein the area codes and the position codes of the initial consonants and finals of Chinese phonetic notation are determined as:

Positions 1-4 of area 1 are correspondingly for: ㄅ, ㄆ, ㄚ, ㄎ

Positions 1-4 of area 2 are correspondingly for: ㄇ, ㄈ, ㄜ, ㄧ

Positions 1-4 of area 3 are correspondingly for: ㄉ, ㄊ, ㄨ, ㄩ

Positions 1-4 of area 4 are correspondingly for: ㄋ, ㄌ, ㄞ, ㄟ

Positions 1-4 of area 5 are correspondingly for: ㄍ, ㄎ, ㄠ, ㄡ

Positions 1-4 of area 6 are correspondingly for: ㄏ, ㄐ, ㄢ, ㄣ

Positions 1-4 of area 7 are correspondingly for: ㄥ, ㄒ, ㄓ, ㄤ

Positions 1-4 of area 8 are correspondingly for: ㄔ, ㄕ, ㄖ, ㄥ

Positions 1-4 of area 9 are correspondingly for: ㄗ, ㄘ, ㄙ, ㄝ.

25. The encoding and input method of any one of claims 19 to 21, wherein for a phrase of a plurity of characters, the encoding comprises the steps of:

for a 2-character phrase, taking the area codes of the initial consonant and the last final of each Chinese character sequentially, thus forming the codes of the 2-character phrase;

for a 3-character phrase, taking the area codes of the initial consonants of the first two characters and the area codes of the initial consonant and last final of the last character sequentially, thus forming the code of the 3-character phrase;

for a multi-character phrase, taking the area codes of the initial consonants of the first three characters, and the area code of the initial consonants of the last character sequentially, thus forming the code of the multi-character phrase.

26. The encoding and input method of any one of claims 14, 15 and 17, wherein the encoding of a sentence formed by a plurity of characters comprises the steps of:

determining the first alphabets in the pronunciation of each Chinese character forming the sentence;

encoding the first alphabets to get the codes of the first alphabets in the pronunciation of each Chinese character; and

taking the codes of the first alphabets in the pronunciation of each Chinese character sequentially as the codes of the sentence.

27. A retrieving method according to the encoding and input method of any one of claims 19 to 21, comprising:

a retrieving method for a retrieving system of electronic publishing type, comprising the steps of:

deriving the codes of the initial consonants and finals of the PinYin syllables of the Chinese character needed to be retrieved;

inputting the codes of the initial consonants and finals, and obtaining their location codes in an index column;

inputting the location codes one by one to get the PinYin syllables;

inputting the PinYin syllables to get the Chinese character needed to be retrieved and its location code; and

searching the Chinese character needed to be retrieved and its description in text column based on the location code;

a retrieving method for a retrieving system of press publishing, comprising the steps of:

deriving the codes of the initial consonants and finals of the PinYin syllables of the Chinese character needed to be retrieved;

searching the codes of the initial consonants and finals, and obtaining their location codes in the index; and

searching the Chinese character needed to be retrieved and its description in text based on the location codes.

28. The encoding and input method of claim 3, wherein

when encoding the Chinese character by its glyph and pronunciation, said

basic elements include the initial consonant and the final representing the pronunciation of the Chinese character, and the basic strokes of the Chinese character and the combination thereof, wherein the area and position codes of the initial consonant, the final, the basic stroke and the combinations thereof are determined respectively, the area and position codes of the initial consonant and the final can use the same numbers as those of the basic stroke and the combination thereof, while the basic strokes of the Chinese character and the combinations thereof and their codes are defined according to the method of claim 4.

29. The encoding and input method of claim 28, wherein the encoding the Chinese character by its glyph and pronunciation comprises the encoding of single character and the encoding of the phrase;

wherein for single character, the code of the Chinese character is formed in sequence by the area codes of the initial consonant and final representing its Chinese pronunciation, the first code of its radical and the last code of its remaining ;

for 2-character phrase, taking the area codes of the initial consonant and the last final of each Chinese character sequentially, thus forming the codes of the 2-character phrase;

for 3-character phrase, taking the area codes of the initial consonants of the first two characters and the area codes of the initial consonant and the last final of the last character, thus forming the codes of the 3-character phrase in sequence; and

for multi-character phrase, taking the area codes of the initial consonants of the first three characters, and the area codes of the final of the last character, thus forming the codes of the multi-character phrase in sequence.

30. The encoding and input method of claim 3, wherein

as to the Japanese character, said basic elements may include the kana forming the Japanese characters and the kana representing the Japanese

pronunciation of Kanji characters, wherein the kana forming the Japanese characters and the kana representing the Japanese pronunciation of Kanji characters are encoded, thus forming the codes of the Japanese characters by the codes of the kana in sequence.

31. The encoding and input method of claim 30, wherein the codes of the kana are only composed of the area codes of the kana.

32. The encoding and input method of claim 30, wherein the Japanese kana are arranged in ten areas:

Positions 1-5 of area 0 are correspondingly for:

あ(ア), い(イ), う(ウ), え(エ),お(オ)

Positions 1-5 of area 1 are correspondingly for:

かが(カ ガ), きぎ(キ ギ), くぐ(ク グ), けげ(ケ ゲ), こご(コ ゴ)

Positions 1-5 of area 2 are correspondingly for:

さざ(サ ザ), しじ(シ ジ), すず(ス ズ), せぜ(セ ゼ), そぞ(ソ ゾ)

Positions 1-5 of area 3 are correspondingly for:

ただ(タ ダ), ちぢ(チ ヂ), つづっ(ツ ヅ ッ), てで(テ デ), とど(ト ド)

Positions 1-5 of area 4 are correspondingly for:

な(ナ), に(ニ), ぬ(ヌ), ね(ネ), の(ノ)

Positions 1-5 of area 5 are correspondingly for: はばぱ(ハ バ パ), ひび ぴ(ヒ ビ ピ), ふぶぷ(フ ブ プ), へべぺ(ヘ ベ ペ), ほぼぽ(ホ ボ ポ)

Positions 1-5 of area 6 are correspondingly for:

ま(マ),み(ミ), む(ム), め(メ), も(モ)

Positions 1-5 of area 7 are correspondingly for:

やゃ (ヤ ャ), い(イ), ゆゅ(ユ ュ), え(エ), よょ(ヨ ョ)

Positions 1-5 of area 8 are correspondingly for:

ら(ラ), り(リ), る(ル), れ(レ), ろ(ロ)

Positions 1-6 of area 9 are correspondingly for:

わ(ワ), ゐ(ヰ), う(ウ), ゑ(エ), を(ヲ), ん(ン).

33. The encoding and input method of claim 3, wherein

as to the Korean characters, said basic elements include the Korean alphabets forming the Korean characters, and the Korean alphabets representing the Korean pronunciation of Hanja character.

34. The encoding and input method of claim 33, wherein the Korean alphabets are arranged sequentially in areas and the codes of the alphabets are formed by the area codes.

35. The encoding and input method of claim 34, comprising

for the Hanja character or Korean character with one syllable representing the Korean pronunciation, based on the writing orders, forming the codes of the Hanja character in sequence by the area codes of the Korean alphabets representing the Korean pronunciation of the Hanja character or forming the Korean character;

for the Hanja character or Korean character with two syllables representing the Korean pronunciation, based on the writing orders, forming the codes of the Hanja character or the Korean character in sequence by the area codes of the initial alphabet and the end alphabet of each Korean phonetic syllablethe Hanja character or Korean character;

for the Hanja character or Korean character with three syllables representing the Korean pronunciation, based on the writing orders, forming the codes of the Hanja character or the Korean character in sequence by the area codes of the initial alphabets of the first two Korean phonetic syllables, and the initial alphabet and the end alphabet of the last Korean phonetic syllable of the Hanja character or Korean character; and

for the Hanja character or Korean character with more than three syllables representing the Korean pronunciation, based on the writing orders, forming the codes of the Hanja character or the Korean character in sequence by the area codes of the initial alphabets of the first three Korean phonetic syllables and the last syllable of the Hanja character or Korean character.

36. The encoding and input method of claim 34, wherein the Korean

alphabets are arranged respectively in areas 1-8 as:

Positions 1-3 of area 1 are correspondingly for: ㄱ ㄴ ㄷ

Positions 1-3 of area 2 are correspondingly for: ㄹ ㅁ ㅂ

Positions 1-3 of area 3 are correspondingly for: ㅅ ㆁ ㅈ

Positions 1-3 of area 4 are correspondingly for: ㅊ ㅋ ㅌ

Positions 1-3 of area 5 are correspondingly for: ㅍ ㅎ ㅏ

Positions 1-3 of area 6 are correspondingly for: ㅑ ㅓ ㅕ

Positions 1-3 of area 7 are correspondingly for: ㅗ ㅛ ㅜ

Positions 1-3 of area 8 are correspondingly for: ㅠ ㅡ ㅣ

37. The encoding and input method of claim 34, wherein the Korean alphabets are arranged respectively in areas 2-9 as follows:

Positions 1-3 of area 2 are correspondingly for: ㄱ ㄴ ㄷ

Positions 1-3 of area 3 are correspondingly for: ㄹ ㅁ ㅂ

Positions 1-3 of area 4 are correspondingly for: ㅅ ㆁ ㅈ

Positions 1-3 of area 5 are correspondingly for: ㅍ ㅋ ㅌ

Positions 1-3 of area 6 are correspondingly for: ㅗ ㅎ ㅏ

Positions 1-3 of area 7 are correspondingly for: ㅠ ㅓ ㅕ

Positions 1-3 of area 8 are correspondingly for: ㅊ ㅛ ㅜ

Positions 1-3 of area 9 are correspondingly for: ㅑ ㅡ ㅣ

38. The encoding and input method of claim 33, wherein the Korean alphabets are arranged sequentially in areas, and taking the area codes of Korean alphabets as the codes of the Korean vowels and consonants.

39. The encoding and input method of claim 38, comprising:

for the Hanja character or Korean character with one syllable representing the Korean pronunciation, based on the writing orders, forming the codes of the Hanja character by the area codes of the initial alphabet, middle alphabet and end alphabet of the Korean syllable representing the Korean pronunciation of the Hanja character or the Korean character;

for the Hanja character or Korean character with two syllables

representing its Korean pronunciation, based on the writing orders, forming the codes of the Hanja character or the Korean character by the area codes of the initial sound and the end sound of each Korean phonetic syllable;

for the Hanja character or Korean character with three syllables representing its Korean pronunciation, based on the writing orders, forming the codes of the Hanja character or the Korean character by the area codes of the initial sound of the first two Korean phonetic syllables, and the initial sound and the end sound of the last Korean phonetic syllable; and

for the Hanja character or Korean character with more than three syllables representing its Korean pronunciation, based on the writing orders, forming the codes of the Hanja character or the Korean character by the area codes of the initial sound of each Korean phonetic syllable.

40. The encoding and input method of claim 39, wherein the 40 Korean vowel and consonant alphabets are arranged in 40 positions of ten areas as follows:

Positions 1-4 of area 0 are correspondingly for: ㄱ ㄴ ㅏ ㅑ

Positions 1-4 of area 1 are correspondingly for: ㄷ ㄹ ㅓ ㅕ

Positions 1-4 of area 2 are correspondingly for: ㅁ ㅂ ㅗ ㅛ

Positions 1-4 of area 3 are correspondingly for: ㅅ ㅇ ㅜ ㅠ

Positions 1-4 of area 4 are correspondingly for: ㅈ ㅊ ㅡ ㅣ

Positions 1-4 of area 5 are correspondingly for: ㅌ ㅋ ㅐ ㅒ

Positions 1-4 of area 6 are correspondingly for: ㅍ ㅎ ㅔ ㅖ

Positions 1-4 of area 7 are correspondingly for: ㄲ ㄸ ㅙ ㅚ

Positions 1-4 of area 8 are correspondingly for: ㅃ ㅆ ㅘ ㅝ

Positions 1-4 of area 9 are correspondingly for: ㅉ ㅞ ㅟ ㅢ

41. The encoding and input method of claim 3, wherein as to the Korean, said basic elements are Korean alphabets, and the area and position codes of the Korean alphabets are determined as follows:

classify the strokes of the Korean alphabets into five basic strokes, i.e.,

horizontal, vertical, left-falling, dot, and hook, which are defined with codes of 1, 2, 3, 4, and 5 respectively; after the codes of strokes of the alphabets are added, the operation of subtracting ten if the sum is equal to or over ten is performed, thus defining the codes of the Korean alphabets respectively as

5　below: 0 for ㅇ、ㅊ , 1 for ― and ㄹ, 2 for ㅣ and ㅎ, 3 for ㅏ、ㅓ、ㅗ、ㅜ, 4 for ㅑ、ㅕ, 5 for ㅛ、ㅠ、ㄱ、ㄴ, 6 for ㄷ、ㅐ, 7 for ㅅ、ㅌ, 8 for ㅁ、ㅂ, and 9 for ㅈ、ㅍ.

42. The encoding and input method of claim 41, wherein the encoding of the Hanja character or Korean character based on the Korean pronunciation

10　of alphabets comprises:

for the Hanja character or Korean character with one syllable representing the Korean pronunciation, based on the writing orders, forming its code in sequence by alphabets representing the Korean pronunciation of the Hanja character or forming the Korean syllable of Korean character;

15　for the Hanja character or Korean character with two syllables representing the Korean pronunciation, based on the writing orders, forming its code in sequence by the codes of the initial alphabet and the end alphabet of each Korean phonetic syllable;

for the Hanja character or Korean character with three syllables

20　representing the Korean pronunciation, based on the writing orders, forming its code in sequence by the codes of the initial alphabets of the first two Korean phonetic syllables, and the initial alphabet and the end alphabet of the last Korean phonetic syllable; and

for the Hanja character or Korean character with more than three syllables

25　representing the Korean pronunciation, based on the writing orders, forming its code in sequence by the codes of the initial alphabets of each Korean phonetic syllables.

43. A retrieving method according to the encoding and input method of claim 41 or 42, comprising:

a retrieving method for a retrieving system of electronic publishing type, comprising the steps of:

deriving the codes of Korean phrase needed to be retrieved;

inputting the codes, and searching the location code of the Korean phrase in an index column;

searching the Korean phrase needed to be retrieved and its description in the text column based on its location code;

a retrieving method for a retrieving system of press publishing type, comprising the steps of:

deriving the codes of the Korean phrase needed to be retrieved;

searching the codes in the index, and getting the location code of the Korean phrase; and

searching the Korean phrase needed to be retrieved and its description in the text based on its location code.

44. The encoding and input method of claim 3, wherein as to the linear character, the codes of word can be formed by the area codes of the alphabets.

45. The encoding and input method of claim 3, wherein as to the linear character, the codes of word can be formed by the area codes and position codes of the alphabets.

46. The encoding and input method of claim 44 or 45, wherein as to English, said basic elements are the English letters, arranged in areas 2-9 as below:

Positions 1-4 of area 2 are correspondingly for: Aa, Bb, Cc, Dd

Positions 1-3 of area 3 are correspondingly for: Ee, Ff, Gg

Positions 1-4 of area 4 are correspondingly for: Hh, Ii, Jj, Kk

Positions 1-3 of area 5 are correspondingly for: Ll, Mm, Nn

Positions 1-3 of area 6 are correspondingly for: Oo, Pp, Qq

Positions 1-3 of area 7 are correspondingly for: Rr, Ss, Tt

Positions 1-3 of area 8 are correspondingly for: Uu, Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz.

47. The encoding and input method of claim 44 or 45, wherein as to English, said basic elements are the English letters, arranged in areas 0-9 as below:

Positions 1-2 of area 0 are correspondingly for: Aa, Bb

Positions 1-2 of area 1 are correspondingly for: Cc, Dd

Positions 1-3 of area 2 are correspondingly for: Ee, Ff, Gg

Positions 1-2 of area 3 are correspondingly for: Hh, Ii

Positions 1-2 of area 4 are correspondingly for: Jj, Kk

Positions 1-3 of area 5 are correspondingly for: Ll, Mm, Nn

Positions 1-3 of area 6 are correspondingly for: Oo, Pp, Qq

Positions 1-3 of area 7 are correspondingly for: Rr, Ss, Tt

Positions 1-3 of area 8 are correspondingly for: Uu, Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz.

48. The encoding and input method of claim 44 or 45, wherein as to Spanish, said basic elements are the Spanish letters, arranged in areas 2-9 as below:

Positions 1-4 of area 2 are correspondingly for: Aa(á), Bb, C(Ch)c(ch), Dd

Positions 1-3 of area 3 are correspondingly for: Ee(é), Ff, Gg

Positions 1-4 of area 4 are correspondingly for: Hh, Ii(í), Jj, Kk

Positions 1-3 of area 5 are correspondingly for: L(Ll)l(ll), Mm, N(Ñ)n(ñ)

Positions 1-3 of area 6 are correspondingly for: Oo(ó), Pp, Qq

Positions 1-3 of area 7 are correspondingly for: Rr, Ss, Tt

Positions 1-3 of area 8 are correspondingly for: Uu(ú), Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz.

49. The encoding and input method of claim 44 or 45, wherein as to Spanish, said basic elements are the Spanish letters, arranged in areas 0-9 as below:

Positions 1-2 of area 0 are correspondingly for: Aa(á), Bb

- 124 -

Positions 1-2 of area 1 are correspondingly for: C(Ch)c(ch), Dd

Positions 1-3 of area 2 are correspondingly for: Ee(é), Ff, Gg

Positions 1-2 of area 3 are correspondingly for: Hh, Ii(í)

Positions 1-2 of area 4 are correspondingly for: Jj, Kk

Positions 1-3 of area 5 are correspondingly for: L(Ll)l(ll), Mm, N(Ñ)n(ñ)

Positions 1-3 of area 6 are correspondingly for: Oo(ó), Pp, Qq

Positions 1-3 of area 7 are correspondingly for: Rr, Ss, Tt

Positions 1-3 of area 8 are correspondingly for: Uu(ú), Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz

50. The encoding and input method of claim 44 or 45, wherein as to German, said basic elements are the German letters, arranged in areas 2-9 as below:

Positions 1-4 of area 2 are correspondingly for: A(A)a(a), Bb, Cc, Dd

Positions 1-3 of area 3 are correspondingly for: Ee, Ff, Gg

Positions 1-4 of area 4 are correspondingly for: Hh, Ii, Jj, Kk

Positions 1-3 of area 5 are correspondingly for: Ll, Mm, Nn

Positions 1-3 of area 6 are correspondingly for: O(O)o(o), Pp, Qq

Positions 1-4 of area 7 are correspondingly for: Rr, Ss, Tt, β

Positions 1-3 of area 8 are correspondingly for: U(ü)u(ü), Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz

51. The encoding and input method of claim 44 or 45, wherein as to German, said basic elements are the German letters, arranged in areas 0-9 as below:

Positions 1-2 of area 0 are correspondingly for: A(A)a(a), Bb

Positions 1-2 of area 1 are correspondingly for: Cc, Dd

Positions 1-3 of area 2 are correspondingly for: Ee, Ff, Gg

Positions 1-2 of area 3 are correspondingly for: Hh, Ii

Positions 1-2 of area 4 are correspondingly for: Jj, Kk

Positions 1-3 of area 5 are correspondingly for: Ll, Mm, Nn

- 125 -

Positions 1-3 of area 6 are correspondingly for: O(O)o(o), Pp, Qq

Positions 1-4 of area 7 are correspondingly for: Rr, Ss, Tt, β

Positions 1-3 of area 8 are correspondingly for: U(ü)u(ü), Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz

52. The encoding and input method of claim 44 or 45, wherein as to Russian, said basic elements are the Russian letters, arranged in areas 2-9 as below:

Positions 1-4 of area 2 are correspondingly for: Аа, Бb, В в, Г г

Positions 1-4 of area 3 are correspondingly for: Д д, Е е, Жж, З з

Positions 1-4 of area 4 are correspondingly for: И и, Й й, К к, Л л

Positions 1-4 of area 5 are correspondingly for: М м, Н н, О о, П п

Positions 1-4 of area 6 are correspondingly for: Pp, Cc, Tt, Yy

Positions 1-4 of area 7 are correspondingly for: Ф ф, Х х, Ц ц, Ч ч

Positions 1-4 of area 8 are correspondingly for: Ш ш, щ, Ъ ъ, Ы ы

Positions 1-4 of area 9 are correspondingly for: Ь ъ, Э э, Юю, Я я

53. The encoding and input method of claim 44 or 45, wherein as to Russian, said basic elements are the Russian letters, arranged in areas 0-9 as below:

Positions 1-3 of area 0 are correspondingly for: Аа, Бb, В в

Positions 1-3 of area 1 are correspondingly for: Г г, Д д, Е е

Positions 1-3 of area 2 are correspondingly for: Жж, З з, И и

Positions 1-3 of area 3 are correspondingly for: Й й, К к, Л л

Positions 1-4 of area 4 are correspondingly for: М м, Н н, О о, П

Positions 1-3 of area 5 are correspondingly for: Pp, Cc, Tt

Positions 1-3 of area 6 are correspondingly for: Yy, Ф ф, Х х

Positions 1-3 of area 7 are correspondingly for: Ц ц, Ч ч, Ш ш

Positions 1-3 of area 8 are correspondingly for: Щ щ, Ъ ъ, Ы ы

Positions 1-4 of area 9 are correspondingly for: Ь ъ, Э э, Юю, Я я

54. The encoding and input method of claim 44 or 45, wherein as to

French, said basic elements are the French letters, arranged in areas 2-9 as below:

Positions 1-4 of area 2 are correspondingly for: Aa(à), Bb, Cc, Dd

Positions 1-3 of area 3 are correspondingly for: Ee(èéê), Ff, Gg

Positions 1-4 of area 4 are correspondingly for: Hh, Ii, Jj, Kk

Positions 1-3 of area 5 are correspondingly for: Ll, Mm, Nn

Positions 1-3 of area 6 are correspondingly for: Oo, Pp, Qq

Positions 1-3 of area 7 are correspondingly for: Rr, Ss, Tt

Positions 1-3 of area 8 are correspondingly for: Uu(u), Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz

55. The encoding and input method of claim 44 or 45, wherein as to French, said basic elements are the French letters, arranged in areas 0-9 as below:

Positions 1-2 of area 0 are correspondingly for: Aa(à), Bb

Positions 1-2 of area 1 are correspondingly for: Cc, Dd

Positions 1-3 of area 2 are correspondingly for: Ee(èéê), Ff, Gg

Positions 1-2 of area 3 are correspondingly for: Hh, Ii

Positions 1-2 of area 4 are correspondingly for: Jj, Kk

Positions 1-3 of area 5 are correspondingly for: Ll, Mm, Nn

Positions 1-3 of area 6 are correspondingly for: Oo, Pp, Qq

Positions 1-3 of area 7 are correspondingly for: Rr, Ss, Tt

Positions 1-3 of area 8 are correspondingly for: Uu(u), Vv, Ww

Positions 1-3 of area 9 are correspondingly for: Xx, Yy, Zz

56. The encoding and input method of claim 44 or 45, wherein as to Greek, said basic elements are the Greek letters, arranged in areas 2-9 as below:

Positions 1-3 of area 2 are correspondingly for: A α , B β , Γ γ

Positions 1-3 of area 3 are correspondingly for: Δ δ , E ε , Z ζ

Positions 1-3 of area 4 are correspondingly for: H η , Θ θ , I ι

Positions 1-3 of area 5 are correspondingly for: K κ , Λ λ , M μ

Positions 1-3 of area 6 are correspondingly for: N ν , Ξ ξ , O o

Positions 1-3 of area 7 are correspondingly for: Π π , P ρ , Σ σ

Positions 1-3 of area 8 are correspondingly for: T τ , Υ υ , Φ φ

5   Positions 1-3 of area 9 are correspondingly for: X x , Ψ ω , Ω Ë

57. The encoding and input method of claim 44 or 45, wherein as to Greek, said basic elements are the Greek letters, arranged in areas 0-9 as below:

Positions 1-2 of area 0 are correspondingly for: A α , B β

10   Positions 1-2 of area 1 are correspondingly for: Γ γ , Δ δ

Positions 1-2 of area 2 are correspondingly for: E ε , Z ζ

Positions 1-2 of area 3 are correspondingly for: H η , Θ θ

Positions 1-2 of area 4 are correspondingly for: I ι , K κ

Positions 1-2 of area 5 are correspondingly for: Λ λ , M μ

15   Positions 1-3 of area 6 are correspondingly for: N ν , Ξ ξ , O o

Positions 1-3 of area 7 are correspondingly for: Π π , P ρ , Σ σ

Positions 1-3 of area 8 are correspondingly for: T τ , Υ υ , Φ φ

Positions 1-3 of area 9 are correspondingly for: X x , Ψ ω , Ω Ë

58. The encoding and input method of claim 44 or 45, wherein as to

20 Arabic, said basic elements are the Arabic letters, arranged in areas 2-9 as below:

Positions 1-3 of area 2 are correspondingly for: ت ل ﻟ

Positions 1-3 of area 3 are correspondingly for: ﻁ ﻑ ﻉ

Positions 1-3 of area 4 are correspondingly for: ﺵ ﺳ ﺯ

25   Positions 1-3 of area 5 are correspondingly for: ﺭ ﺫ ﺩ

Positions 1-4 of area 6 are correspondingly for: ﺏ ﺕ ﺙ ﺩ

Positions 1-4 of area 7 are correspondingly for: ﻩ ﺍ ﺉ ﻯ

Positions 1-4 of area 8 are correspondingly for: ﻩ ﻍ ﻑ ﻉ ﺡ

Positions 1-4 of area 9 are correspondingly for: ﺡ ﺥ ﺉ ف

- 128 -

59. The encoding and input method of claim 44 or 45, wherein as to Arabic, said basic elements are the Arabic letters, arranged in areas 0-9 as below:

Positions 1-4 of area 0 are correspondingly for: ت   ل   ظ   ط

Positions 1-4 of area 1 are correspondingly for: ف   ق   ش   س

Positions 1-4 of area 2 are correspondingly for: ز   ر   ذ   د

Positions 1-2 of area 3 are correspondingly for: ث   ـث

Positions 1-2 of area 4 are correspondingly for: ص   و

Positions 1-3 of area 5 are correspondingly for: ه   ا   ك

Positions 1-2 of area 6 are correspondingly for: ڤ   ف

Positions 1-2 of area 7 are correspondingly for: ع   ع

Positions 1-3 of area 8 are correspondingly for: خ   ح   ج

Positions 1-2 of area 9 are correspondingly for: پ   ف

60. A retrieving method according to the encoding and input method of claim 30, 44 or 45, comprising:

a retrieving method for a retrieving system of electronic publishing, comprising the steps of:

encoding the words of linear character or hybrid character needed to be retrieved;

inputting the codes of the words, and getting the words and their location codes in a prompt column;

inputting the location code of each word needed to be retrieved one by one to get the location code of the linear character or the hybrid character; and

searching and obtaining the linear character or the hybrid character needed to be retrieved and its description in a text column based on its location code;

a retrieving method for a retrieving system of press publishing,

comprising the steps of:

encoding the words of linear character or hybrid character needed to be retrieved;

searching the codes of the words in the index to get the words and their

5   position codes;

searching and obtaining the words of linear character or hybrid character needed to be retrieved and its description in text column based on their position codes.

61. The encoding and input method of claim 1, further comprising the

10   steps of: according to the glyph of a punctuation, with ten numerals from 0 to 9, encoding the strokes forming the glyph of the punctuation by the operational encoding method of addition and subtraction; classifying the strokes of the punctuation into five basic strokes, i.e. horizontal (一), vertical (丨), left-falling (丿), dot (丶), and hook (乙), defined with codes of 1, 2, 3, 4, and 5

15   respectively; adding the code of the strokes of the punctuation, and performing the operation of subtracting ten if the sum is equal to or over ten on the summation result to derive the code of the punctuation; wherein the encoding is performed by single punctuations and dual punctuations according to the number of elements forming the punctuation.

20   62. The encoding and input method of claim 61, wherein the codes of single punctuations are as below: the code of full stop(。) is 0; hyphen (-) and dash(—) is 1; comma (,) is 3; each of caesura sign (、), separation mark (.), emphasis mark (.), and ellipsis (.) is 4; exclamation mark (!) is 6; semicolon (;) is 7; colon (:) is 8; and the code of question mark (?) is 9;

25   the codes of dual punctuations are as follows: the code of single book-title mark (〈〉) is 55; double book-title mark (《》) is 10; vertical single quotation mark (「」) is 55; vertical double quotation mark (『』) is 00; horizontal double quotation mark ("") is 86; horizontal single quotation mark ('') is 43; bracket () is 43; hollowed square bracket (〖〗) is 09; and the code

- 130 -

of solid square bracket(【 】) is 09.

63. The encoding and input method of claim 1, further comprising the steps of: encoding the numbers in various categories of characters as follows: 零, O, and 0 are encoded as 0; 壹, 一, and 1 as 1; 贰, 二, and 2 as 2; 叁, 三, and 3 as 3; 肆, 四, and 4 as 4; 伍, 五, and 5 as 5; 陆, 六, and 6 as 6; 柒, 七, and 7 as 7; 捌, 八, and 8 as 8; 玖, 九, and 9 as 9; 拾 and 十 are encoded as 10.

64. The encoding and input method of claim 1, wherein said processing device for encoding and inputting the word characters comprises keyboard, mouse, host computer, monitor, key display, printer, modem, router, and information exchanging codes, built-in codes, world character database, font pattern codes, and font exchanging code.

65. The encoding and input method of claim 1 and the computer processing device of claim 62, wherein the keyboard in said computer processing device is a keyboard comprising ten number keys 0-9 as character keys and 14 function keys including answer (yes) key, hang-up (no) key, toggle key, space key, deletion key, mouse (confirm) key, left-click (exit) key, right-click key, cursor up key, cursor down key, cursor left key, cursor right key, * (@) key, and # (.) key.

66. The encoding and input method of claim 1, wherein said computer device comprises a mobile phone with softwares.

67. The encoding and input method of claim 1, wherein said computer device comprises a personal digital assistant PDA.

68. The encoding and input method of claim 1, wherein said computer device comprises a palm computer.

69. The encoding and input method of claim 1, further comprising the steps of:

input codes of world characters, phrases, or sentence sequentially by means of keys 0-9;

confirm the completion of inputting the codes of world characters, phrases, or sentence by pressing space bar to confirmation key;

select the world characters or phrase with keys of Page Up and Down function or other arrow keys;

5   confirm the selected world character or phrase with the keys 1-9.

70. A programming method of computer programming language in world character, said method comprising the steps of:

taking the world characters, punctuations, symbols and numbers as the programming characters, and programming based on the type, format, content

10   and application of computer languages; and

encoding and inputting the world character by using the encoding and input method and its processing device according to claim 1.

71. A programming method of machine language in world character, said method comprising the steps of:

15   using world characters, numbers, punctuations and symbols to describe the task to be completed by the computer machine language;

using any 4 decimal numerals to indicate the world characters, numbers, punctuations and symbols that describe the task to be completed by the machine language; or encoding the world characters, numbers, punctuations

20   and symbols describing the task to be completed by the machine language by 4 decimal numerals based on the encoding method according to claim 1, using the codes of 4 decimal numerals to indicate the world characters, numbers, punctuations and symbols that describe the task to be completed by the machine language;

25   using 4 binary numbers to represent a decimal numeral and totally using 16 binary numbers to represent 4 decimal numerals.

72. A programming method of assembly language in world character, said method comprising the steps of:

using world characters, numbers, punctuations and symbols to describe

the task to be completed by the computer assembly language;

using any 4 decimal numerals to indicate the world characters, numbers, punctuations and symbols that describe the task to be completed by the assembly language; or encoding the world characters, numbers, punctuations and symbols describing the task to be completed by the assembly language by 4 decimal numerals based on the encoding method according to claim 1, using the codes of 4 decimal numerals to indicate the world characters, numbers, punctuations and symbols that describe the task to be completed by the assembly language;

73. A design method of computer chip instructions in world characters, comprising the steps of:

taking Chinese character, alphabets, punctuations, symbols and numbers as the instruction design symbols to indicate the task to be completed by the computer chip instructions;

based on the encoding method according to claim 1, indicate a world character by the codes of 4 decimal numerals; and

represent the task to be completed by the computer chip with 16 binary numbers 0 and 1.

74. A design method of computer operating system in world character, said method comprising the steps of:

take graphs, world characters, alphabets, kana, punctuations, symbols and numbers as operators to design a computer operating system on the basis of its type, application and task;

name a file with the world characters, and access the storage address of the file in the disk by the file name in world characters;

encode and input world characters regarding or regardless of the countries to which the characters pertain according to the encoding and input method of claim 1.

75. A design method of wireless interface protocol in world character,

said method comprising the steps of:

describe the task to be completed by the wireless interface protocol with world characters, numbers, punctuations, and symbols;

according to the encoding method of claim 1, encode the world characters,
5 numbers, punctuations, symbols describing the task to be completed by the wireless interface protocol;

according to the encoding and input method of claim 1 and the computer processing device of claim 64, input and process the codes of the world characters, numbers, punctuations, and symbols describing the task to be
10 completed by the wireless interface protocol.

76. A design method of wireless internet protocol in world character, said method comprising the steps of:

describe the task to be completed by the wireless internet protocol with world characters, numbers, punctuations, and symbols;

15 according to the encoding method of claim 1, encode the world characters, numbers, punctuations, symbols describing the task to be completed by the wireless internet protocol;

according to the encoding and input method of claim 1 and the computer processing device of claim 64, input and process the codes of the world
20 characters, numbers, punctuations, symbols describing the task to be completed by the wireless internet protocol.